

The opinion in support of the decision being entered today  
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JOHN FREDERICK PORTER  
and GERAINT ROBERTS

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Appeal 2006-2299  
Application 10/615,671  
Technology Center 1700

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Decided: August 17, 2007

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Before EDWARD C. KIMLIN, BRADLEY R. GARRIS, and  
LINDA M. GAUDETTE, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the final rejection of claims 1-9 and 22-29. We have jurisdiction under 35 U.S.C. § 6.

The Appellants claim a fabric reinforcement useful in reinforcing an alkaline matrix such as cement comprising a plurality of warp yarns having a first twist, a plurality of weft yarns having a second twist greater than the

first twist, and a resinous coating on the warp and weft yarns having a coating weight distribution ratio of less than 2.0:1. Independent claim 1 is illustrative and reads as follows:

1. A fabric reinforcement useful in reinforcing an alkaline matrix comprising:

(a) a plurality of warp yarns having a first twist (turns/inch);

(b) a plurality of weft yarns having a second twist which is greater than said first twist; and

(c) a resinous coating disposed over a substantial portion of said warp and weft yarns after they have been assembled or laid together, such as to produce a coating weight distribution ratio ( $WPU_{cd}/WPU_{md}$ ) of less than about 2.0:1, before said fabric reinforcement is embedded within, or adhesively or mechanically bonded to said alkaline matrix.

The references set forth below are relied upon by the Examiner as evidence of anticipation and obviousness:

Kobayashi	US 4,460,633	Jul. 17, 1984
Endo	US 4,581,275	Apr. 8, 1986
Wu	US 5,038,555	Aug. 13, 1991

Claims 1-5, 7, 9, 22, and 25-29 are rejected under 35 U.S.C. § 102(b) as being anticipated by, or alternatively under 35 U.S.C. § 103(a) as being obvious over, Kobayashi.

Claim 23 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kobayashi in view of Endo, and claims 6, 8, and 24 are correspondingly rejected over these references and further in view of Wu.

These rejections cannot be sustained.

The § 102/§ 103 rejection over Kobayashi is premised on the Examiner's position that Patentee's fabric-reinforced resin product corresponds to the fabric reinforcement with resinous coating as defined by the rejected claims (Answer 3). However, Kobayashi's product constitutes a laminated composite board (col. 4, ll. 63-64). As correctly argued by Appellants, this composite board cannot be properly regarded as the here-claimed fabric reinforcement since the prior art board is not expressly or inherently disclosed as having the flexibility and drapability characteristics ascribed to the fabric reinforcement (Specification 8 and 15). Stated differently, it is not reasonable and consistent with the Specification to interpret Appellants' claimed fabric reinforcement as encompassing the composite board of Kobayashi.

The § 102/§ 103 rejection also is based on the Examiner's belief that Appellants' claimed coating weight distribution ratio is inherently disclosed by, or alternatively would have been obvious over, Kobayashi (Answer 3-4). This position is based on figure 2 of Kobayashi showing greater breadth of warp fibers compared to weft fibers (Answer 10). However, Appellants' claimed distribution ratio is not based on the relative breadth of yarn and the resinous coating thereon. Instead, it is based on the weight of coating divided by the weight of yarn (Specification 3). For this reason, the relative breadth of the warp and weft yarns is irrelevant to the coating weight distribution ratio.

The § 103 rejection based on Kobayashi in view of Endo also is improper for reasons unrelated to the infirmities discussed above. According to the Examiner, “[i]t would have been obvious to a person having ordinary skill in the art at the time of the invention to use the fabric of Kobayashi . . . to reinforce cement in order to derive greater usage from the fabric, as taught by Endo” (Answer 5). This obviousness conclusion is not well taken.

Presumably, the Examiner’s above-quoted reference to “the fabric of Kobayashi” relates to Patentee’s fabric/resin combination, that is, the laminated composite board (Kobayashi, col. 4, ll. 63-64). However, the applied references contain no teaching or suggestion of using this composite board to reinforce cement. Likewise, these references provide no reasonable expectation that the composite board would successfully reinforce cement. On the other hand, if the Examiner’s reference to “the fabric of Kobayashi” relates to Patentee’s fabric in the absence of resin, the proposed combination of reference teachings would not result in the invention defined by the rejected claim which requires a resinous coating.

Finally, the § 103 rejection based on Kobayashi, Endo, and Wu is improper because this last-mentioned reference does not supply the above-discussed deficiencies of Kobayashi and Endo.

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In light of the foregoing, we cannot sustain any of the § 102 and § 103 rejections advanced by the Examiner on this appeal.

The decision of the Examiner is reversed.

REVERSED

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